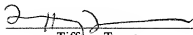


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Tiffany Turner

Date: May 22, 2001

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

HP Docket No.: 10960787-7

**Inventor(s):** C. Venkatraman, et. al.

**Group Art Unit:**

**Serial No.:**

**Examiner:**

**Filed:** Herewith

**Title:** EMBEDDING WEB ACCESS FUNCTIONALITY INTO A  
DEVICE FOR USER INTERFACE FUNCTIONS

**Continuation Application of Application**

**Serial No.:** 09/721,409

**Filed:** November 21, 2000

**Continuation Application of Application**

**Serial No.:** 09/387,278

**Filed:** August 31, 1999

**Continuation Application of Application**

**Serial No.:** 08/740,289

**Filed:** October 25, 1996

**PRELIMINARY AMENDMENT**

ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D.C. 20231

10960787-7 052201

Sir:

Prior to the examination of the above-referenced application, please amend the application as follows.

**IN THE SPECIFICATION**

On page 1, line 1, insert:

This application is a continuation of Application No. 09/721,409, filed on November 21, 2000, which is a continuation of Application No. 09/387,278, filed on August 31, 1999, now U.S. Patent No. 6,170,007, which is a continuation of Application No. 08/740,289, filed on October 25, 1996, now U.S. Patent No. 5,956,487.

Page 5, please delete the first paragraph and insert therefor the following:

A solution for providing widely accessible, low cost and enhanced user interface functions for a device is disclosed. The solution involves embedding web access functionality into the device including a web server that provides a device web page. The device includes an embedded network interface that enables access to the device web page by a web browser. A user of the web browser accesses the user interface functions for the device through the device web page. The web server functionality may be implemented with existing circuitry in a device, such as an existing processor, memory, and input/output circuitry that normally perform device-specific functions, thereby avoiding the extra cost and space required for dedicated web server hardware.

09662604-062201

Page 11, please delete the second paragraph and insert therefor:

In one embodiment, the device 10 is a printer device wherein the processor 200 and the memory 210 perform image rendering functions and the device-specific hardware 300 includes printer hardware and associated circuitry and wherein the input/output circuitry 220 provides network access to the printer device 10. The web server functionality is embedded into the printer device 10 by providing software or firmware for the processor 200 and by utilizing space available in the memory 210 and by using the existing input/output circuitry 220 such as Ethernet circuitry to transfer HTML files.

Page 12, please delete the second paragraph and insert therefor:

In yet another embodiment, the device 10 is a washing machine wherein the processor 200 and the memory 210 perform functions for controlling wash cycles. The device-specific hardware 300 includes hardware such as motors, valves, sensors, and associated circuitry. The web server functionality is embedded into the washing machine 10 by providing software or firmware for the processor 200 and by utilizing space available in the memory 210 and by adding the input/output circuitry to the device 10.

Page 20, please delete the first paragraph and insert therefor:

The web page 18 for the printer may also include manuals, parts lists, and other associated publications. These publications may be stored within the device 10 in, for example, a nonvolatile memory, or may be referenced elsewhere via hyperlinks contained in the web page 18. These publications contain dynamic information such as updated manuals as well as new and updated software driver routines for the device 10.

**IN THE CLAIMS**

Please cancel claims 1-32 without prejudice.

Please add the following claims:

33. (New) A user interface method for a fax machine comprising:  
generating a fax machine web page within the fax machine, wherein the fax machine web page provides a set of user interface functions for the fax machine, wherein some of the user interface functions enable control functions of the fax machine; and  
providing access to the fax machine web page from a web browser external to the fax machine to permit a user of the web browser to access the user interface functions for the fax machine through the device web page.
34. (New) The method of claim 33, wherein the step of generating a fax machine web page includes the step of generating an HTML file that defines the fax machine web page in response to an HTTP command received from the web browser.
35. (New) The method of claim 34, wherein the HTTP command specifies a URL corresponding to the fax machine.
36. (New) The method of claim 34, wherein the HTML file contains at least one of (1) a set of information pertaining to the fax machine, (2) a set of URLs that control a set of predetermined functions for the fax machine wherein each URL may point to a web page located internal to the fax machine, and (3) a hyperlink to an external web page that specifies additional information pertaining to the fax

machine.

37. (New) A user interface method for a video player that reads video and audio information from a storage medium, comprising:

generating a video player web page within the video player, wherein the video player web page provides a set of user interface functions for the video player, wherein some of the user interface functions enable control functions of the video player; and

providing access to the video player web page from a web browser external to the video player to permit a user of the web browser to access the user interface functions for the video player through the device web page.

38. (New) The user interface method of claim 37 wherein the storage medium is an optical storage medium.

39. (New) The user interface method of claim 37 wherein the storage medium is magnetic tape.

40. (New) The user interface method of claim 37 wherein the video player is a video player/recorder that reads and writes video and audio information to an optical storage medium.

41. (New) The user interface method of claim 37 wherein the video player is a video player/recorder that reads and writes video and audio information to a magnetic tape storage medium.

42. (New) The method of claim 37, wherein the step of generating a video player web page includes the step of generating an HTML file that defines the video player web page in response to an HTTP command received from the web browser.

43. (New) The method of claim 42, wherein the HTTP command specifies a URL corresponding to the video player.

44. (New) The method of claim 42, wherein the HTML file contains at least one of (1) a set of information pertaining to the video player, (2) a set of URLs that control a set of predetermined functions for the video player wherein each URL may point to a web page located internal to the video player, and (3) a hyperlink to an external web page that specifies additional information pertaining to the video player.

45. (New) A user interface method for a television comprising:  
 generating a television web page within the television, wherein the television web page provides a set of user interface functions for the television, wherein some of the user interface functions enable control functions of the television; and  
 providing access to the television web page from a web browser external to the television to permit a user of the web browser to access the user interface functions for the television through the device web page.

46. (New) The method of claim 45, wherein the step of generating a television web page includes the step of generating an HTML file that defines the television web page in response to an HTTP command received from the web browser.

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of (1) a set of information pertaining to the thermostat, (2) a set of URLs that control a set of predetermined functions for the thermostat wherein each URL may point to a web page located internal to the thermostat, and (3) a hyperlink to an external web page that specifies additional information pertaining to the thermostat.

53. (New) A user interface method for a refrigerator comprising:  
generating a refrigerator web page within the refrigerator, wherein the refrigerator web page provides a set of user interface functions for the refrigerator, wherein some of the user interface functions enable control functions of the refrigerator; and

providing access to the refrigerator web page from a web browser external to the refrigerator to permit a user of the web browser to access the user interface functions for the refrigerator through the device web page.

54. (New) The method of claim 53, wherein the step of generating a refrigerator web page includes the step of generating an HTML file that defines the refrigerator web page in response to an HTTP command received from the web browser.

55. (New) The method of claim 54, wherein the HTTP command specifies a URL corresponding to the refrigerator.

56. (New) The method of claim 54, wherein the HTML file contains at least one of (1) a set of information pertaining to the refrigerator, (2) a set of URLs that control a set of predetermined functions for the refrigerator wherein each URL may point to a web page located internal to the refrigerator, and (3) a hyperlink to an external web page that specifies additional information pertaining to the



refrigerator.

57. (New) A user interface method for a washing machine comprising:  
generating a washing machine web page within the washing machine,  
wherein the washing machine web page provides a set of user interface functions  
for the washing machine, wherein some of the user interface functions enable  
control functions of the washing machine; and

providing access to the washing machine web page from a web browser  
external to the washing machine to permit a user of the web browser to access the  
user interface functions for the washing machine through the device web page.

58. (New) The method of claim 57, wherein the step of generating a washing  
machine web page includes the step of generating an HTML file that defines the  
washing machine web page in response to an HTTP command received from the  
web browser.

59. (New) The method of claim 58, wherein the HTTP command specifies a  
URL corresponding to the washing machine.

60. (New) The method of claim 58, wherein the HTML file contains at least one  
of (1) a set of information pertaining to the washing machine, (2) a set of URLs  
that control a set of predetermined functions for the washing machine wherein each  
URL may point to a web page located internal to the washing machine, and (3) a  
hyperlink to an external web page that specifies additional information pertaining  
to the washing machine.

61. (New) A user interface method for a disk drive comprising:  
generating a disk drive web page within the disk drive, wherein the disk drive web page provides a set of user interface functions for the disk drive, wherein some of the user interface functions enable control functions of the disk drive; and  
providing access to the disk drive web page from a web browser external to the disk drive to permit a user of the web browser to access the user interface functions for the disk drive through the device web page.
62. (New) The method of claim 61, wherein the step of generating a disk drive web page includes the step of generating an HTML file that defines the disk drive web page in response to an HTTP command received from the web browser.
63. (New) The method of claim 62, wherein the HTTP command specifies a URL corresponding to the disk drive.
64. (New) The method of claim 62, wherein the HTML file contains at least one of (1) a set of information pertaining to the disk drive, (2) a set of URLs that control a set of predetermined functions for the disk drive wherein each URL may point to a web page located internal to the disk drive, and (3) a hyperlink to an external web page that specifies additional information pertaining to the disk drive.
65. (New) A user interface method for an oscilloscope comprising:  
generating an oscilloscope web page within the oscilloscope, wherein the oscilloscope web page provides a set of user interface functions for the oscilloscope, wherein some of the user interface functions enable control functions of the oscilloscope; and  
providing access to the oscilloscope web page from a web browser external

to the oscilloscope to permit a user of the web browser to access the user interface functions for the oscilloscope through the device web page.

66. (New) The method of claim 65, wherein the step of generating an oscilloscope web page includes the step of generating an HTML file that defines the oscilloscope web page in response to an HTTP command received from the web browser.

67. (New) The method of claim 66, wherein the HTTP command specifies a URL corresponding to the oscilloscope.

68. (New) The method of claim 66, wherein the HTML file contains at least one of (1) a set of information pertaining to the oscilloscope, (2) a set of URLs that control a set of predetermined functions for the oscilloscope wherein each URL may point to a web page located internal to the oscilloscope, and (3) a hyperlink to an external web page that specifies additional information pertaining to the oscilloscope.

69. (New) A user interface method for a spectrum analyzer comprising:  
 generating a spectrum analyzer web page within the spectrum analyzer, wherein the spectrum analyzer web page provides a set of user interface functions for the spectrum analyzer, wherein some of the user interface functions enable control functions of the spectrum analyzer; and  
 providing access to the spectrum analyzer web page from a web browser external to the spectrum analyzer to permit a user of the web browser to access the user interface functions for the spectrum analyzer through the device web page.

70. (New) The method of claim 69, wherein the step of generating a spectrum analyzer web page includes the step of generating an HTML file that defines the spectrum analyzer web page in response to an HTTP command received from the web browser.

71. (New) The method of claim 70, wherein the HTTP command specifies a URL corresponding to the spectrum analyzer.

72. (New) The method of claim 70, wherein the HTML file contains at least one of (1) a set of information pertaining to the spectrum analyzer, (2) a set of URLs that control a set of predetermined functions for the spectrum analyzer wherein each URL may point to a web page located internal to the spectrum analyzer, and (3) a hyperlink to an external web page that specifies additional information pertaining to the spectrum analyzer.

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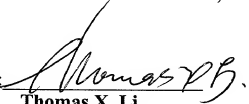
**REMARKS**

The specification has been amended to correct some typographical errors. New claims have been added to cover various embodiments of the invention. No new matter has been added. Applicant's would like to bring to the examiner's attention that many of the claims added in this preliminary amendment have similarities with claims 6-9 and 21-24 in U.S. Patent No. 6,170,007. Applicants respectfully request allowance of this application.

Respectfully submitted,

**Chandrasekar Venkatraman, et al.**

BY:

  
**Thomas X. Li**

Reg. No. **37,079**

Date: **May 2, 2001**

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

Page 5, first paragraph

A solution for providing widely accessible, low cost and enhanced user interface functions for a device is disclosed. The solution involves embedding web access functionality into the device including a web server that provides a device web page. The device includes an embedded network interface that enables access to the device web page by a web browser. A user of the web browser accesses the user interface functions for the device through the device web page. The web server functionality may be implemented with existing circuitry in a device, such as an [exiting] ~~existing~~ processor, memory, and input/output circuitry that normally perform device-specific functions, thereby avoiding the extra cost and space required for dedicated web server hardware.

Page 11, second paragraph

In one embodiment, the device 10 is a printer device wherein the processor 200 and the memory 210 [preform] ~~perform~~ image rendering functions and the device-specific hardware 300 includes printer hardware and associated circuitry and wherein the input/output circuitry 220 provides network access to the printer device 10. The web server functionality is embedded into the printer device 10 by providing software or firmware for the processor 200 and by utilizing space available in the memory 210 and by using the existing input/output circuitry 220 such as Ethernet circuitry to transfer HTML files.

Page 12, second paragraph

In yet another embodiment, the device 10 is a washing machine wherein the processor 200 and the memory 210 [preform] perform functions for controlling wash cycles. The device-specific hardware 300 includes hardware such as motors, valves, sensors, and associated circuitry. The web server functionality is embedded into the washing machine 10 by providing software or firmware for the processor 200 and by utilizing space available in the memory 210 and by adding the input/output circuitry to the [video] device 10.

Page 20, first paragraph

The web page 18 for the printer may also include manuals, parts lists, and other associated publications. These publications may be stored within the device 10 in, for example, a nonvolatile memory, or may be referenced elsewhere via hyperlinks contained in the web page 18. These publications contain dynamic information such as updated manuals as well as new and updated software driver routines for the video device 10.